

SUSTAINABLE URBAN TRANSPORT AND MOBILITY

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Improving the quality of life and economic attractiveness of cities

Urban mobility is a core challenge for cities. In order to ensure that development is sustainable, inclusive and economically effective, the challenge lies in limiting the congestion that hinders cities and comes with an increase in air pollution, CO_2 emissions and a high road traffic death rate. In fast growing cities in emerging and developing countries, there is a pressing need to improve current transport systems and provide alternative solutions to personal vehicles, solutions with a higher capacity that use less space, emit less carbon and are, at the same time, affordable and tailored to residents' needs.

Sustainable cities and communities

Among the Sustainable Development Goals (SDGs) adopted by the United Nations General Assembly in New York on 30 September 2015, the 11th, "Make cities and human settlements inclusive, safe, resilient and sustainable", aims to ensure access for all, including the most vulnerable persons, to safe, accessible and viable transport systems

at an affordable cost, while improving road safety. This entails building the planning capacities of local authorities and developing consultation with residents.



Mobility: Part of all our daily lives

• Some **6 billion** journeys are made every day in the world's largest cities

• **70%** of the world population will be living in urban areas by 2050

• **70 million** new inhabitants move to cities in developing countries every year

• The financial cost of traffic congestion in cities accounts for the equivalent of **2 to 5%** of the GDP of each city

• The number of personal vehicles doubles every **7 years** in developing countries

• Urban transport generates $2.3Gt CO_2 eq$ a year and this figure could double by 2050

Providing transport systems tailored to demand

AFD assists countries throughout the process to develop their urban mobility policies, from gaining knowledge of demand (*i.e.* current and future mobility flows) to identifying the best response to needs, depending on the capacity required and the constraints of urban integration.

AFD therefore finances:

- Massive and structural collective modes: urban trains, peri-urban services, metros, tramways, bus lanes (Bus Rapid Transit BRT);
- Complementary modes: high capacity buses, minibuses, metrocable lines, waterway transport;
- Non-motorized mode infrastructures: cycle paths, pedestrian walkways;
- Upgrading and optimization of road networks in urban areas: development of intersections, crossings, rehabilitation and creation of structural urban road networks and bypasses;
- Optimization of traffic management.

AFD also supports innovation with less conventional solutions. It has now extended its reflection to non-motorized transport modes and new travel practices (car pooling, car sharing, etc.) which result from digital technologies.



Thinking transport with the city and thinking the city on the basis of transport

AFD assists its local and national counterparts in their reflection on mobility and ensures that:

Urban transport planning fits in with a comprehensive and coherent vision of urban development and mobilizes all the drivers for mobility in a coordinated manner (public transport services and road infrastructure, parking, fuel taxation, rules to access city centers).

AFD consequently promotes the development of urban mobility plans that include all these elements (SUMPs – Sustainable Urban Mobility Plans);

- With regards to mobility corridors, high capacity transport solutions serve all existing and future urban development nodes and are combined with a densification along routes (Transit Oriented Development – TOD);
- Finally, for the implementation of a project, the transport system is well integrated into the urban fabric (integration of stations, renovation of surrounding neighborhoods, upgrading of public spaces).

Integrated approach in the Dominican Republic

AFD has granted several financings for a total of EUR 325m for the construction and extension of Santo Domingo's second metro line. This support also includes the renovation and development of the neighborhoods served, the construction of a cable feeder transport line and technical assistance for the land densification and development around the corridor (Paris Town Planning Workshop – APUR).



Construction of the Santo Domingo metro © Benjamin Petit



Rabat and Casablanca tramways in Morocco: An example of transport-urban planning integration

AFD has allocated two loans for the Rabat and Casablanca tramways of EUR 45m and EUR 23m, respectively. This support has been a driver of ambitious urban development projects. These operations with local development companies have promoted institutional progress in the sector and the involvement of private operators for the operation of the transport service.

In Rabat, AFD has also mobilized financing from the European Union and decentralized cooperation (Lyon) to assist the authorities for institutional, intermodality and integration issues.





AFD's transport strategy: A long-term commitment

Every year, AFD dedicates almost 15% of its commitments to transport, all modes included, *i.e.* some EUR 1bn of annual commitments. For each mode, the transport strategy focuses on appraising projects on the basis of their economic relevance (efficient transport), social impacts (equitable transport) and environmental impacts (sustainable transport). Urban transport accounts for 57% of AFD's transport project portfolio. It mobilizes the full range of AFD's financial tools, with an increasing involvement of local authorities.





Trend in AFD's commitments in urban transport (by geographical area)



Modal breakdown of volumes committed to urban transport projects (2004-2014)







Governance: A driver to more effectively integrate and optimize networks and facilitate their financing

The governance of transport systems is key in ensuring that there is an effective coordination and integration of all modes of transport and the required regulation of public and private operators. AFD aims to optimize all aspects of integration:

- Institutional integration via the organizing or regulatory authorities, whose remit may cover all or part of the modes;
- **Urban** integration, by ensuring that the different forms of travel are classified and included in land-use planning;
- **Systemic** integration: introduction of multimodal fares, shared ticketing systems, real-time multimodal information systems;
- Physical integration: Development of interchanges and neighborhoods-stations, improvement in connections and transfers, signage systems to manage the "last kilometer/mile" with pedestrian and two-wheel modes.

Innovating by supporting developments in mobility in the digital age

The services offered by digital technology are revolutionizing the transport sector. These changes, which can already be seen in developed countries, should be even more rapid and structural in developing countries, where fragmented "informal" transport provides a significant part of services. Digital technology should give a better understanding of demand, optimize the operation of existing systems, and create or structure new services (structuring of informal transport, car sharing, demand-responsive transport, ticketing systems, etc.).

AFD is supporting this transition towards a new paradigm *via* pilot actions in Ghana.

Improving urban road networks: An essential link in the transport systems of African cities

The rapid and continuous expansion of African cities has prompted AFD to finance a number of urban road projects in order to complete road networks, but also to eliminate road congestion points or bottlenecks. In addition to improving individual mobility, the vast majority of these investments benefit informal public transport (minibuses and taxis), which are often the main mode of transport. The upgrading of the Brazzaville coastal highway (EUR 40m), the urban road program in Côte d'Ivoire (EUR 150m) and the development of secondary cities in Cameroon (EUR 60m) are examples of operations that are essential to the proper functioning of Sub-Saharan African cities.

Hanoi metro in Vietnam

Hanoi's first metro line is a large-scale infrastructure project in Vietnam's capital and should relieve congestion in the city center. The project is cofinanced with the Asian Development Bank, European Investment Bank, and French Government. It will offer a real alternative to the residents of Hanoi to encourage them to stop using their personal vehicles or motorcycles.



Construction of Hanoi metro © Alain Béchereau, Systra

The core challenge is to come up with new solutions tailored to Sub-Saharan African cities, which will receive the bulk of urban growth in the coming decades. Today, mobility is largely based on a highly fragmented informal private sector, which generally meets almost 90% of needs. Alongside reflection on mass transport solutions, the aim is to help these "informal" operators become professional in order to provide residents with a clear and high quality range of services. This results in the creation of cooperative groups, an improvement in service quality by upgrading vehicles, or better information *via* digital tools (as in Nairobi and Accra).



Urban transport: A driver in the fight against climate change

The urban transport projects financed by AFD seek to combine:

- Mixed-use and compact urban planning;
- Low-carbon collective solutions, by combining incentive policies (high quality services) and repressive policies (restrictions on car use);
- Greater energy efficiency for each mode (e.g.: electric vehicles).

In this way, some 40% of emissions could be saved compared to a "business as usual" scenario, and the overall cost would be lower for the local authority, due to the economic and social cost of pollution, road deaths and congestion. AFD actively supports the

Mobilise Your City (MYC) initiative launched in 2015 in the context of COP21. It encourages cities to prepare Sustainable Urban Mobility Plans (SUMPs), combined with national climate policies, with ambitious objectives to reduce the carbon footprint.



Contributions to transport governance reforms in Brazil

Since 2012, the Île-de-France Transport Authority (STIF) has been assisting the States of Rio de Janeiro and São Paulo in preparing their draft law for the creation of an organizing and regulatory urban transport authority.



Sharing experience and building the capacities of contracting authorities

AFD has established a network of leading French and international institutions in order to build the capacities of implementing agencies. For example, it has signed partnership agreements with French transport organizing authorities (STIF, SYTRAL), CEREMA (Center of Technical Expertise of the French Ministry of Ecology and Sustainable Development), foreign think tanks (SLOCAT) and French think tanks (CODATU), and many other specialized institutions, such as SSATP (Sub-Saharan Africa Transport Policy Program). It is currently supporting some fifteen countries and cities by establishing different forms of relations between peer entities: cooperation or technical assistance, town-twinning, partnerships, etc.

AFD also organizes specific training for all transport actors *via* its in-house training institute, CEFEB, but also in partnership with the Centre for Mediterranean Integration (CMI), or with the annual training sessions of the Leaders in Urban Transport Planning Program, which is jointly coordinated with the World Bank and CODATU. The aim is to share actors' experiences and create a network of experts to assist governments and cities in their decision-making. The publication of thematic papers and collections, such as "Who Pays What?", also ensures there is a wide dissemination of international good practices. Agence Française de Développement (AFD), a public financial institution that implements the policy defined by the French Government, works to combat poverty and promote sustainable development. AFD operates on four continents *via* a network of 72 offices and finances and supports projects that improve living conditions for populations, boost economic growth and protect the planet. In 2015, AFD earmarked EUR 8.3bn to finance projects in developing countries and for overseas France.



PROPARCO, AFD's subsidiary dedicated to private investment, promotes private investment in emerging and developing countries in order to boost growth, promote sustainable development and reach the Millennium Development Goals. Its financing is tailored to the specific needs of investors in the productive sector, financial systems, infrastructure and private equity investment.

www.proparco.fr



The French Facility for Global Environment / Fonds Français pour l'Environnement Mondial (FFEM) is a bilateral public fund initiated by the French Government in 1994. The FFEM secretariat and its financial management are entrusted to Agence Française de Développement (AFD). FFEM co-finances projects that encourage the protection of the global environment in developing countries. Its co-financing is exclusively *via* grants and is used for the implementation of pilot projects that combine environmental protection and economic development in the recipient countries. FFEM is an influential strategic instrument for the French policy on Official Development Assistance regarding global environmental protection. Its activities focus on the topics of biodiversity, international waters, climate change, land degradation and desertification, persistent organic pollutants and stratospheric ozone layer. By the end of 2014, FFEM had co-financed 275 projects with EUR 317m. Two-thirds were earmarked for sub-Saharan Africa and the Mediterranean.

www.ffem.fr - ffem@afd.fr



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